

WHAT IS CLAIMED IS:

1. A pedestrian protection system by alleviating a secondary impact on a pedestrian when a vehicle collides with a pedestrian, the pedestrian protection system comprising:

means for alleviating a collision impact on a pedestrian;

a plurality of load sensors or pressure sensors mounted on a front bumper of the vehicle and aligned in the longitudinal direction of the bumper;

an acceleration sensor for detecting acceleration of the vehicle;

a speed sensor for detecting a traveling speed of the vehicle;

means for determining whether an obstacle colliding with the vehicle is a pedestrian based on output signals from the load sensors or the pressure sensors, the acceleration sensor and the speed sensor; and

a controller device that actuates the alleviating means when the determining means determines that the obstacle colliding with the vehicle is a pedestrian, wherein:

the determining means performs its determination based on the output signal from each one of the plurality of the load sensors or the pressure sensors.

2. A pedestrian protection system by alleviating a secondary impact on a pedestrian when a vehicle collides with a pedestrian, the pedestrian protection system comprising:

means for alleviating a collision impact on a pedestrian;

a plurality of displacement sensors mounted on a front bumper of the vehicle and aligned in the longitudinal direction of the bumper;

an acceleration sensor for detecting acceleration of the vehicle;

a speed sensor for detecting a traveling speed of the vehicle;

means for determining whether an obstacle colliding with the vehicle is a pedestrian based on output signals from the displacement sensors, the acceleration sensor and the speed sensor; and

a controller device that actuates the alleviating means when the determining means determines that the obstacle colliding with the vehicle is a pedestrian, wherein:

the determining means performs its determination based on the output signal from each one of the plurality of the displacement sensors.

3. The pedestrian protection system as in claim 1, wherein:

the determining means changes threshold levels for determining that the obstacle colliding with the vehicle is a pedestrian according to the traveling speed of the vehicle detected by the speed sensor.

4. The pedestrian protection system as in claim 2, wherein:

the determining means changes threshold levels for determining that the obstacle colliding with the vehicle is a pedestrian according to the traveling speed of the vehicle detected by the speed sensor.

5. The pedestrian protection system as in claim 1, wherein:

the alleviating means is a device for popping up a vehicle hood that is hinged at a front end thereof.

6. The pedestrian protection system as in claim 2, wherein:

the alleviating means is a device for popping up a vehicle hood that is hinged at a front end thereof.

7. The pedestrian protection system as in claim 3, wherein:

the alleviating means is a device for popping up a vehicle hood that is hinged at a front end thereof.

8. The pedestrian protection system as in claim 1,  
wherein:

the alleviating means is an airbag adapted to be  
inflated on the vehicle hood.

9. The pedestrian protection system as in claim 2,  
wherein:

the alleviating means is an airbag adapted to be  
inflated on the vehicle hood.

10. The pedestrian protection system as in claim 3,  
wherein:

the alleviating means is an airbag adapted to be  
inflated on the vehicle hood.